The following comments are from British Petroleum – Comment Letter #1

November 16, 2012

VIA EMAIL
Don Hopps
Planning, Rule Development and Area Sources
SCAQMD
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Hopps:

BP respectfully submits these comments regarding amendments to Rules 219 and 222, proposed by AQMD on November 2, 2012. In addition to the areas where AQMD has proposed changes, we have also suggested a couple of clarifying changes in other sections.

Proposed Amended Rule 219

1. Rule 219(b)(4) - What is the averaging period to determine if the equipment exceeds one pound of NOx per day? If the basis for applying the one pound NOx threshold is BACT, then the calendar monthly emissions should be divided by 30. Please consider revising this section to reflect the averaging period. — 1-1

Proposed Amended Rule 222

1. Rule 222(b) Table 1, Boilers or Steam Generators & Process Heaters source category - Consider revising to: "Boilers or Steam Generators & Process Heaters with a rated heat input ... and produce less than one pound of NOx Emissions per day (based on a 30 calendar day average)." If the basis for applying the one pound NOx threshold is BACT, then the calendar monthly emissions should be divided by 30. — 1-2

2. Rule 222(b) Table 1, Commercial Charbroilers and Associated Air Pollution Control Equipment - It seems that a barbecue grill could meet the definition for a charbroiler. We suggest that AQMD add wording that differentiates portable vs. stationary charbroilers (e.g., Stationary Commercial Charbroilers and Associated Air Pollution Control Equipment). — 1-3

3. Rule 222(d)(1)(B) - Please provide clarification on the requirement to "comply with all operating conditions imposed on the emissions source". How are operating conditions to be imposed? Is this done by AQMD when they issue the registration or approval letter? Or, does the owner/operator follow the equipment manufacturer's recommended operating conditions? This is confusing, and clarification would be helpful. — 1-4

4. Rule 222(d)(1)(G) - Why is recordkeeping required for 5 years? Is this a SIP approved rule, thus enforceable under Title V? — 1-5

If you have any questions, please contact Susan Stark, BP consultant on AQMD Issues. She may be reached at 310-847-3630 or by email at susan.stark@bp.com.

Sincerely,

Matt Rezvani

Matt Rezvani

Response to Comment #1-1
Staff believes the commentor intended to comment on Proposed Amended Rule 219 paragraph (b)(3) which discusses a one pound NOx emission output limit for power pressure washers, portable hot water or steam washers and cleaners rather than fuel cells. Staff did not use a averaging methodology in the calculation of NOx emission output, staff based the NOx emission output on a daily basis.

Response to Comment #1-2
Please see Response to Comment #1-1.

Response to Comment #1-3
Staff believes that the current language is sufficient and encompasses both portable and stationary commercial charbroiling equipment.

Response to Comment #1-4
The nexus of the rule amendment will be to transition certain small emission producing equipment sources that are currently permitted into a more streamlined Rule 222 filing program. Staff proposes to do this by first exempting these certain small emissions sources in Proposed Amended Rule 219 and then transition them into Proposed Amended Rule 222 and retain the operating conditions that were on the equipment's written permit. Rule 222 is a filing program, similar to a registration, and staff will maintain all the operating conditions that were originally on the permit to operate on the filing.

Response to Comment #1-5
Yes, both Rules 219 and 222 are SIP rules and they are companion rules to the permit rule (Rule 203). The SIP rules such as the Regulation XI rules, that are applicable to sources frequently visited by AQMD inspectors, retain any required records for compliance for 3 years whereas facilities under Title V are required to retain any required records for compliance for 5 years. However, the equipment that falls into the Rules 219 and 222 may not be inspected as frequently and the records will be required to be retained for a longer period of time, that being 5 years.

The following comments are from Cambro Manufacturing Company – Comment Letter #2

Rule 219 Exemption Information For Portable Plasma Cutters

Kent D. Adams, P. E.

Cambro Manufacturing Company

1) Typical Equipment Description
   - Portable plasma arc cutter with hand-held torch
   - Used for cutting steel, including stainless steel.
   - 18 inches long, 7 inches wide, and 13 ½ inches high
   - Thermal Dynamics Pakmaster 38 XL
   - Serial number 01486903
   - 240 volts, 29 amps

2) Process Description
   The unit is moved to the location where it is needed. The equipment is plugged in to a local power outlet, and connected to compressed air. The work piece is clamped or otherwise placed in the correct position for cutting. The ground cable is attached to the work piece. The unit is turned on. The operator dons a protective mask. The operator holds the pistol grip of the torch in his hand, and brings the cutting tip close to the work. The operator depresses the torch trigger, which activates the arc and the compressed air. The arc melts the metal, and the compressed air blows the molten metal out of the kerf. The operator moves the cutting head along the surface of the work, by hand and by eye, until the desired cut has been made. The operator then turns off the equipment.

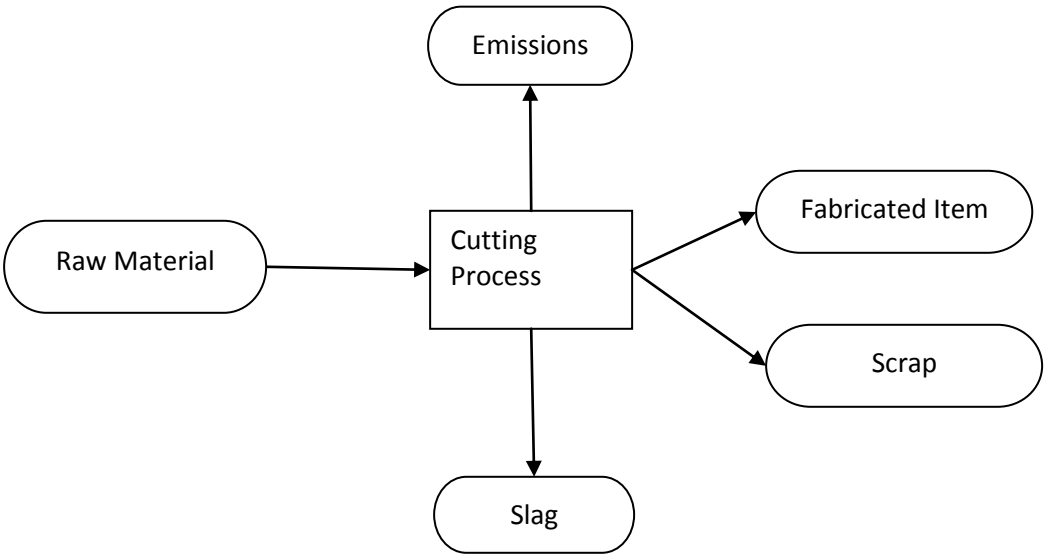
3) Operating Schedule
   - Average usage per day: 6 minutes
   - Maximum usage per day: 60 minutes
   - Days per week: 6
   - Weeks per year: 52

4) Process Rate

The cutting rate is approximately 39 inches per minute, while cutting 16 gauge stainless steel (0.0625 inch thick).

5) Fuels and Burners Used
No fuels or burners are used in this equipment. The equipment is electric.

6) Flow Diagram



7) Exhaust System
There is no exhaust system or stack on this equipment.

8) Emissions Data
Ebadian reported a respirable mass generation rate of 395 mg/min when cutting a stainless steel plate of 1.2 mm thickness at a cutting rate of 1.39 meters per minute. The respirable mass was defined as the mass of the airborne particles of aerodynamic diameter < 10 µm. (Ebadian, et al, Size Distribution and Rate of Production of Airborne Particulate Matter Generated During Metal Cutting. Miami, Florida: Hemispheric Center for Environmental Technology, 2001).

We will assume that any metal not emitted as fume will end up on the floor as slag or will stay with the scrap. The alloy is 304 stainless steel, which is 18% chromium and 8 % nickel. Therefore, we will assume chromium emissions are 18% of total PM-10 fume emissions, and nickel emissions are 8% of total PM-10 emissions.

Bromssen reported an emission rate of 6.3 g/min for oxides of nitrogen when cutting a stainless steel plate of 8 mm thickness with a torch rated at 200 amperes. The emission factor is for dry cutting using air as the plasma gas. (Bromssen, et al, Emission of Fume, Nitrogen Oxides, and Noise in Plasma Cutting of Stainless and Mild Steel. Goteborg, Sweden: Swedish Institute of Production Engineering Research, 1994).

Emission Rates:
Because Cambro's plasma arc cutting is done at a slower speed than in the Ebadian study, it is appropriate to reduce the emission rate by a corresponding amount. The maximum cutting speed in our process is 39 inches (1 meter) per minute. Therefore the fume emission rate for our process would be:

395 mg PM10 / 1.39 meters = 284 mg / meter, metal fume.

Our maximum cutting rate is 1 meter per minute, therefore the maximum fume emission rate is 284 mg per minute.

Chromium Fume:

The emission of chromium would be:
(284 mg PM10) (0.18) = 51 mg Cr per minute.

Nickel Fume
The emission of nickel would be:
(284 mg PM10) (0.08) = 22.7 mg Ni per minute.

Oxides of Nitrogen
A torch rated at 200 amperes was used in the Bromssen study, and it produced emissions of 6.3 grams of NO per minute. Our torch is rated at 29 amperes. Therefore it would be appropriate to adjust the emission rate by a corresponding amount.
(6.3 grams NO) (29 / 200) = 0.91 grams NO per minute.

Emissions per day
The average usage for this equipment is approximately 6 minutes per day. Based on this usage, the average emissions will be estimated as follows:

- Chromium Fume: (0.051 g / min) (6 min / d) (lb / 454 g) = 0.00067 lb per day
- Nickel Fume: (0.0227 g / min) (6 min / d) (lb / 454 g) = 0.0003 lb per day
- Oxides of Nitrogen: (0.91 g / min) (6 min / d) (lb / 454 g) = 0.012 lb per day

9) Air Quality Impact

The air quality impact of this equipment is expected to be very low, for the following reasons:

- This is a very small, portable, hand-held unit, of a type that can be purchased in a hardware store or from a tool catalog.
- This unit is used only for repairs and maintenance in the Mold Shop and in the Maintenance Department.
- This unit is only used for a few minutes per day. The rest of the time, it is in storage at the Tool Room.
- This unit is not used for production purposes. The stainless steel parts that are part of Cambro's products are purchased from outsource suppliers and are not made at Cambro. Therefore there would be no need to cut any production parts.
- The emissions from this unit are very small and therefore should be considered to be *de minimus* emissions. On a daily basis, the emissions are so low that a permit should not be required.
- In many situations, the amount of time that these units are used for cutting stainless steel is a very low percentage of the total usage time.

10) Economic Impact

- These small, portable, plasma cutting units are commonly used at auto body shops, welding shops, maintenance departments, and by hobbyists in home garages. Typically, these hand held units are used sparingly, and in conjunction with arc welding operations. These units are normally used to save time in cutting operations prior to welding. They also can be used in areas where other cutting methods are more difficult, resulting in higher quality work.
- These small, portable, hand-held units typically cost anywhere from $800.00 to $1800.00. However, the cost of these units is dwarfed by the cost of the SCAQMD permit fees of more that $3600.00 per unit. We believe that to have permit fees that exceed the price of the unit being regulated is a financial hardship on a business.
- The anticipated financial hardship of requiring a permit on these small units may dissuade businesses from purchasing these small plasma cutters, and may force them to use a cutting method that is more time consuming and labor intensive. This could affect the profit margin of a company, especially a small business.
- This financial hardship may cause a downturn of sales of small plasma cutters, which may, in turn, be bad for the economy in general.

11) Recommendation

We recommend that any plasma cutter with all of the following characteristics be exempt from the permit requirement:
- Portable unit
- Hand held torch
- Manufacturer's rating of 50 amperes or less.
- Used for repairs and maintenance purposes only, not for production uses.
- Usage limited to 60 minutes or less per day

2-1

Response to Comment #2-1

Staff's biggest concern with plasma-arc cutting stainless steel materials is the toxics that are formed during the operation. For this reason, Staff crafted the exemption for plasma-arc cutters but did not provide the exemption for plasma-arc cutters that are rated more than 400 watts. Staff appreciates your recommendations for plasma-arc cutters and believes that the proposed rule language will be sufficient for the equipment having portability capacity and equipped with hand held torches. For this amendment, staff does not believe usage requirements such as non-production uses or repair and maintenance purposes only should be incorporated into the rule language. Staff does have concerns with an amperage rating of 50 or less since 120 volts times 50 amperes is equal to 6,000 watts, well above the 400 watts in the proposed rule language.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from ERM – Comment Letter #3

From: Paul Tranquill [Paul.Tranquill@erm.com]
Sent: Monday, November 05, 2012 9:44 AM
To: Don B Hopps
Subject: Proposed Amended Rule 219

Importance: High

I have reviewed the latest proposal for Rule 219. The machining exemption (g) does not correspond to the staff report issued for this rule. The staff report has the following:

> Machining equipment and granulating {219(g)(1)}
>
> Staff is proposing to clarify the rule language regarding machining operations in Rule 219 paragraph (g)(1) by including granulating operations. Granulators are used in the plastics industry and are used to granulate plastic products during plastic recycling operations. Granulators have been observed by staff field personnel who report that granulating operations are not a significant source of particulate emissions.
>
> The current rule language is as follows: "Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment exclusively venting such equipment. This exemption does not include asphalt pavement grinders." Staff proposes to add additional language as follows: "Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, granulating, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment exclusively venting such equipment. This exemption does not include asphalt pavement grinders." Staff does not anticipate any additional cumulative emissions with this revision.

3-1

The most recent proposed rule does not include the word "granulating." Is this than oversight or did staff determine that the granulating should not be added. If staff determined that granulating should not be included then the staff report is requires revision.

Paul Tranquill
ERM
1351 South Grove Avenue, Suite 110
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F: 1 909 947 3499

Response to Comment #3-1

Staff appreciates the commentor's input and has taken action to correct the staff report. The granulators were removed from the proposed rule language that was included in the public workshop version of the preliminary draft staff report due to engineering staff concerns with potential particulate emissions. The paragraph regarding granulating should not have been in the public consultation meeting version of the draft staff report.

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The following comments are from Hydro Tek Systems – Comment Letter #4

From: Alan Greer x222 [agreer@hydrotek.us]
Sent: Tuesday, November 13, 2012 11:30 AM
To: Don B Hopps
Subject: Comments on PAR219/222

Good morning Mr. Hopps,

I attended the meeting last week with Dr. Marlo Dean and was pleased with the listing definition for the pressure washer category. Dr. Dean felt that the BTU level should be raised to 650,000 to benefit the industry. I understand CETA's position but also have to speak on behalf of Hydro Tek Systems and we are capable of working with the 500,000 btu requirement. Also, are prepared to install dual hour meters on all systems for monitoring once implemented. I would like the verbage to change to power washers without definition of portable or stationary as to eliminate confusion with inspections and types of equipment. A Hot Power Washer is exactly that whether it is portable or stationary. It is still a Hot Power Washer. Other than that change we at Hydro Tek Systems are pleased with the definition and would like to thank you all for your hard work and efforts to help our industry comply. As always if you have any questions fell free to contact me.

4-1

Best regards,
Alan Greer

Alan Greer, Sr. Product Development Engineer
HYDRO TEK SYSTEMS INC.
2353 Almond Ave.
Redlands, CA 92374
(800) 274-9376 | (909) 799-9222 | ext: 222
agreer@hydrotek.us | www.hydrotek.us
Brilliant Design, Tough on Grime

Response to Comment #4-1
Staff appreciates the comment and has been working with industry in regard to increasing the heat input rate capacity of the portable pressure washers. Staff has learned that a small increase, from 500,000 Btu/hour to 550,000 Btu/hr, will allow several pressure washers to be included into the Rule 222 filing program while still maintaining the 50 gallon per day limit for diesel fuel use. Staff has also evaluated the need for the wording in the proposed language and has decided to remove the word "portable." Staff acknowledges that a stationary pressure washer must be permanently mounted along with the natural gas line due to city and county code requirements to satisfy safety concerns for seismic activity. Therefore, the new revising rule language for proposed amend rule 219 paragraph (b)(4) will be as follows:

(4) ~~*Portable power*~~ *Power pressure washers and hot water or steam washers and cleaners, that are equipped with a heater or burner that is* ~~*fueled either by natural gas, methanol, liquefied petroleum gas, or any combination thereof or*~~ *designed to be fired on diesel fuel, has a rated maximum heat input capacity of 500,000 Btu per hour or less, is equipped with non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and* ~~*than*~~ *uses no more than 50 gallons of fuel* ~~*is used*~~ *per day. This exemption does not apply to piston-type internal combustion engines or turbines.*

The following comments are from Karcherna – Comment Letter #5

From: Marlo.Dean@karcherna.com
Sent: Monday, November 19, 2012 8:23 AM
To: Laki Tisopulos
Cc: James Koizumi; Don B Hopps
Subject: Pressure Washer

Laki,

When rule 1146.2 was amended, the definition of a water heater was changed. Since that change, Rule 1146.2 can now be interpreted to mean that natural gas fired pressure washers are subject to 1146.2 emission limits. However, Rule 1146.2 was never intended to regulate these natural gas fired devices according to the AQMD staff that developed the rule. We are requesting the AQMD put into writing (a rule interpretation) that pressure washers were never intended to be regulated by 1146.2 and therefore do not have to certify their equipment under that rule and that are not subject to a district permit (according to current rule 219 language). 5-1

You need this to be done regardless of what size of units are included in 222 registration. I request that the AQMD put in writing that natural gas fired pressure washers are not subject to 1146.2 (would include units that can be fired on either natural gas or lpg/propane, the above request should address that also). This will address all gas fired pressure washers up to 2 mmBtu/hr. 5-2

I enjoyed the opportunity to meet you November 8th, 2012 at the scoping meeting. It is a good feeling to know we are making progress in developing rules which address the pressure washer industry and we no longer fall under boiler regulation. You may be interested to know that recently the National Boiler Association finally recognized that pressure washers are not boilers and on October 1-5, 2012 at the National Board Center in Columbus, OH declared pressure washers are exempt from any boiler standard under ASME Section I. 5-3

If you have any questions please give me a call.

Dr. Marlo Dean
Board of Director
CETA
4275 NW Pacific Rim Blvd.
Camas, WA 98607
Ph. 877-283-2412 ext. 2701
Fax 360-833-9200

Response to Comment #5-1

Staff disagrees with the commentor's assessment regarding natural gas fired pressure washers are subject to Rule 1146.2 emission limits. The primary intent for the small emission source power pressure washers was to

streamline the currently permitted power pressure washers into the Rule 222 filing program by first providing an exemption for the power pressure washers that qualify and then adding them to the Rule 222 filing program.

Response to Comment #5-2
Please see response to comment #5-1

Response to Comment #5-3
Staff appreciates the commentor's input.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from MWD – Comment Letter #6

From: Kaufman,Carol Y [cykaufman@mwdh2o.com]
Sent: Friday, November 16, 2012 3:22 PM
To: Don B Hopps
Cc: Naveen Berry; Koch,Bart; jbell mwdh2o.com; Guillory,Dan
Subject: MWD Comments to Proposed Amended Rules 219 and 222
Attachments: G14049 IM Asphalt Spreader Truck.pdf

Importance: High

Dear Mr. Hopps,

This e-mail is a written follow-up to Metropolitan's oral comments provided at the November 8th Public Consultation Meeting for Proposed Amended Rules (PAR) 219 and 222. We are asking that the proposed amendments to incorporate asphalt day tankers in the rules be expanded to include existing units equipped with burner(s) designed to fire on diesel. 6-1

Metropolitan currently has an asphalt tanker truck (attached SCAQMD Permit No. G14049, A/N 507335) that is used to maintain roadways and parking lots at our desert facilities, located within both the Mojave Desert Air Quality Management District, and the SCAQMD. The truck is used only during the summer months on an as needed basis to repair existing asphalt surfaces. As you can see from the attached permit, the truck's operation is restricted to no more than eight hours per day and 216 hours per year; additionally, based on the need for road maintenance, the truck may not even be used every year in one or both of the air districts. The truck has a capacity of 2,000 gallons, and is equipped with a 15 gallon capacity diesel burner. 6-2

Metropolitan's asphalt tanker truck fits the description provided in PAR 219 (m)(23), except for the requirement that the burner be designed to fire exclusively on liquefied petroleum gases. According to the October 17, 2012 Notice of Preparation of a Draft Environmental Assessment, the SCAQMD database shows 72 permitted asphalt day tankers, of which only one is fired with diesel fuel (presumably Metropolitan's). Therefore, given the extremely low use of our existing unit and its apparent status as the only one of its type permitted with the SCAQMD, we request that PAR 219 be amended to include existing asphalt tanker trucks equipped with diesel burner(s) and allow them to be transitioned into the Rule 222 filing program. Because of the unit's extremely limited and infrequent use in the SCAQMD jurisdiction, its inclusion should not negatively affect any emission changes. 6-3

The amended PAR 219 language would be as follows:

"Equipment, including asphalt day tankers, used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch, that is mounted on a motor vehicle, with a maximum holding capacity of less than 600 liters (159 gallons) or equipment, including asphalt day tankers, with a maximum holding capacity of 600 liters (159 gallons) or more but less than 18,925 liters (5,000 gallons) and equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only." 6-4

Thank you for your consideration of our comments. Please contact me if you have any questions or require further information.

Sincerely,

Carol Kaufman
Air Quality Program Manager
Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012
213-217-6207
FAX 213-217-6700
Cell 310-850-6105

Response to Comment #6-1
Staff appreciates the comment and recalls the comment made during the November 8, 2012 Public Consultation Meeting as well as the comment that was submitted during the commenting period held for the July 19 2012 Public Workshop in regard to diesel fired asphalt day tankers and the proposed rule language for both proposed amended rule 219 and 222 (please see response to comment #6-2).

Response to Comment #6-2
Staff understands that the Metropolitan Water District uses their asphalt day tanker during the summer months on an as needed basis and may not even be used every year. However, including the diesel fired asphalt day tankers into the Rule 222 filing program would increase the foregone emissions to the rule making effort. In fact, the NOx emission output from diesel fuel is 20.0 pounds per thousand gallons whereas the emission output from LPG, propane and butane is 12.8 pounds per thousand gallons; diesel fuel produces 56% more NOx than LPG, propane or butane.

Response to Comment #6-3
Please see Response to Comment #6-3

Response to Comment #6-4
Staff believes the current proposed rule language regarding the asphalt day tankers is sufficient and will retain the current requirements as shown in proposed amended rules 219 and 222.

The following comments are from Radtech International – Comment Letter #7

November 16, 2012

Mr. Robert Pease
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Re: Public comments to Proposed Amended Rule 219

Dear Robert:

RadTech International is pleased to comment on the proposed amendments to Rule 219. RadTech supports the district's efforts to improve air quality in the Basin without sacrificing a healthy business climate and believes that the implementation of UV/EB technology can accomplish both goals. 7-1

We support staff efforts to provide incentives to companies who reduce their emissions and believe the Rule 219 amendments present an opportunity to that goal. We appreciate your attention to these issues and look forward to a productive rulemaking effort. As mentioned during the public workshop, we urge the district to focus on actual emission reductions rather than on the "type" of formulation. Currently, the rule has different requirements for "non-solvent" UV/EB but, there is no definition of "non-solvent". I mentioned the example of acetone potentially being used in formulations as a "solvent" but, for district purposes, acetone is exempt. The current language under sections l(6) and (h)(1) should be clarified and the distinction between different types of UV/EB formulations should be removed. 7-2

Additionally, we would suggest adding language for UV/EB processes to mirror the current proposed language under section (h)(7) which, is currently limited to "air pollution control equipment". UV/EB is a pollution prevention technology that can achieve emissions equivalent to those achieved by control devices and, provides the added benefit of no greenhouse gas emissions due to the fact that it is not a combustion type process. Thus, the technology is meritorious of the same benefit extended to add-on control devices. 7-3

We appreciate your consideration and look forward to providing any additional information you may need.

Sincerely,

Rita M. Loof
Director, Environmental Affairs

Response to Comment #7-1
Thank you for supporting the proposed amendments to Rule 219 and 222 and for your comment letter.

Response to Comment #7-2
The primary intent of this project was to provide certain small emitting sources that currently have AQMD written permits with an exemption in Rule 219 that would then transition the equipment to Rule 222 in efforts to streamline these certain small emitting sources. The actual emission reductions for coatings can be seen in Regulation IX rules such as Rules 1107, 1113, 1130, 1136 and 1145. Staff believes the current rule language is sufficient and will retain both "UV or electron beam" in the text.

Response to Comment #7-3
Please see Response to Comment #7-2.

The following comments are from Sempra Utilities – Comment Letter #8

November 16, 2012

Don Hopps
Air Quality Specialist Planning and Rules
SCAQMD 21865 Copley Drive
Diamond Bar, CA 91765

Subject: SCAQMD Rule 219 Proposed Rule Amendments

Mr. Hopps:

Southern California Gas Company (SCG) respectfully requests that SCAQMD reconsider their decision to not include language in Rule 219 that makes it explicitly clear that small natural gas odorant tanks do not need to be permitted.

At the request of SCAQMD, SCG had previously submitted comments with respect to Rule 219 (m)(9), providing language and supporting information to clarify that the units do not trigger the need for permits. (A copy of this submittal is attached hereto for reference.) SCAQMD's response in the staff report, however, was an unexpected departure from previous discussions with staff on the purpose of our comments. For example, in earlier discussions, Senior Manager Brian Yeh and permit staff indicated that they understood why these units should be permit-exempt, and that they only needed supporting information. In addition, SCAQMD Compliance personnel visited several natural gas producer sites with small odorant tanks, to better understand how these units operate and to determine if there were significant emissions.

The stated purpose of Rule 219, as SCAQMD knows, is to manage the administrative burdens and economic costs of permitting, by identifying and exempting from permitting "*. . . certain equipment that emit small amounts of air contaminants. . .*" SCG's odorant tanks certainly meet the public policy behind Rule 219, since they are small and are closed systems that do not emit air contaminants. Indeed these units are significantly smaller than the 250 gallon threshold listed in 219 (m)(9) – some even as small as 10 gallons. Moreover, odorant is meant to be detected immediately for safety purposes. Consequently, if there was leak it would immediately be detected by smell.

8-1

The fact that there have been no documented nuisance complaints based on odors from these units further bolster the fact that these units do not emit air contaminants sufficient to justify the need for permitting. The time and energy to permit these small odorant tanks, some as small as 10 gallons run contrary to the basic premise behind Rule 219. There is no measurable environmental compliance benefit to requiring a permit for these units. Requiring permitting for any unit should be based on emissions calculations, therefore SCG is requesting:

SCAQMD provide emission calculations for the odorant tanks to demonstrate that it exceeds emission levels that warrant permitting.

Most troubling is response 5-2 in Appendix A, in which SCAQMD states that natural gas odorant tanks need to be permitted "*. . . primarily due to the concerns for potential odor complaints issues . . .*" SCG believes that these comments are misplaced, are inaccurate, and are not based on any factual occurrences. To date SCG has not received or been made aware of any instance or circumstance where a natural gas odorant tank was determined to be the source of an odor complaint or public nuisance. SCG is concerned that this response mischaracterizes these odorant tanks as chronic or high probability nuisance sources. If SCG is incorrect, then it respectfully requests:

SCAQMD to produce documentation of any and all such nuisance complaints traceable to a SCG-owned odorant tanks.

8-2

More critically, from a legal standpoint, neither Rule 219 nor any other of SCAQMD's rules, state that "nuisance potential" constitutes a sufficient basis for permitting. If SCAQMD is concerned about the lack of any recourse if a nuisance complaint is ever filed and odorant tanks remain exempt from Rule 219, then it should revisit its Rule 402. Rule 402 prohibits the discharge "from any source whatsoever" of air contaminants sufficient to cause a nuisance to the public. Therefore, a piece of equipment – permitted or not –if the cause of a public nuisance, SCAQMD can always issue a NOV alleging a violation of Rule 402.

If this change to Rule 219 reflects a change in SCAQMD policy regarding nuisance as a basis for permitting, then SCAQMD should take this opportunity to include many other pieces of equipment that have nuisance potential. Some of these pieces of equipment have a long history of creating odor complaints and in some cases public nuisances. These pieces of equipment include but are not limited to:

1. Public sewer manholes
2. Product recovery tanks for subsurface contamination
3. Clothes dryers less than 2 million BTU
4. Tenter Frames less than 2 million BTU
5. Metal melting furnaces and equipment at foundries
6. Coffee roasting equipment
7. Buffers
8. Baghouses and cyclones venting wood working facilities.

Additionally, SCG finds it interesting that SCAQMD chose to provide several additional exemptions to asphalt day tanks and increase the amounts for exemption to 1000 gallons in one instance and 5000 gallons in another. Asphalt day tankers have one of the highest if not the highest instance for creating odor complaints in SCAQMD.

8-3

Therefore SCG is asking that SCAQMD provide examples where nuisance potential was used for a facility or facilities that has not received odor complaints or public nuisances.

Unlike other operations or companies that use various pieces of equipment to generate revenues, natural gas odorant tanks are <u>required</u> by the Department of Transportation (DOT). The purpose of having odorant is to comply with DOT requirements for odorizing natural gas for safety reasons. As a CPUC regulated utility, SCG is required to accept all natural gas that meets our natural gas specifications. That means each producer in California that produces natural gas must have an odorant facility in order to inject sufficient odorant in its gas to meet DOT regulations.

Finally, SCAQMD has conveniently forgotten what it advised SCG several years ago. In 2008, SCG wrote a letter and asked SCAQMD if it agreed with SCG's assessment that small natural gas odorant tanks do not require a permit from the SCAQMD. At that time, SCG had 17 odorant tanks with SCAQMD permits to operate. SCAQMD, at that time, determined that permits were not required, and the 17 permits were subsequently inactivated. The circumstances and rules that existed in 2008 are the same today. Nuisance potential was not an issue at that time and nothing has changed since then to justify making nuisance potential an issue today. As a result of this "flip flop", the SCAQMD is trying to force SCG to reapply for permits that SCAQMD had inactivated in 2008. Based on the current permitting fees, each permit will now cost $3440.06 for a total of $58,481.02.

In conclusion, SGC urges SCAQMD to reconsider and provide a clear and concise exemption for natural gas odorant tanks and the equipment associated with them.

8-4

Thank you

Zach Muepo

July 17, 2008

South Coast Air Quality Management District

Mr. Edwin Pupka
Senior Enforcement Manager Refinery/Energy
Mr. Mike Mills
Senior Engineering Manager Area Sources

21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Subject: Deactivation of Odorizer Permits Exempt Under Rule 219(m)(9)

Dear Sirs:

As a California Public Utility Commission (CPUC) regulated natural gas transmission utility, Southern California Gas (SCG) must accept CPUC quality commercial natural gas from local "producers" which is a CPUC mandate. Producers are small to medium sized crude oil producing fields which produce CPUC quality commercial natural gas as a byproduct of their primary operations. This producer gas must be odorized to conform to CPUC safety standards and regulations. SCG has installed and operates several odorizing systems at 17 producer sites throughout the SCAQMD jurisdiction. Each one of the odorizing systems has an odorant tank of less than 251 gallons.

After careful review of the permits to operate for the odorizing systems at the producer sites, we have determined that the systems are exempt under Rule 219 m(9) which states the following:

"Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 950 liters (251 gallons) capacity. . ." .

Pursuant to this section of the rule we have completed and attached the necessary forms to this letter to ask for the permits to operate for the odorizing systems to become inactive. Please return all prorated fees associated with this inactivation. If you have any question please feel free to contact me.

Regards
Zach Muepo

Response to Comment #8-1

Rule Development staff has meet with staff engineers in regard to the small natural gas odorant tanks in regard to providing an exemption in proposed amended rule 219 to exempt such equipment that meets the requirements stated in the proposed rule language. Staff has determined that certain odorant tanks could be exempted by proposed amended rule 219 and then filing in the Rule 222 filing program. Staff agrees that these small odorant tanks do fit into the category for certain equipment that emit small amounts of air contaminates and has provided for the small odorant tanks in proposed amended rule 222.

Response to Comment #8-2
Staff's concern for potential odor complaints from equipment that includes odorant storage is a valid concern should the equipment release the 50/50 mix of XX & YY from the tank. However, staff agrees with the commentor that if the product does not vent to atmosphere, there would not be a potential odor nuisance issue. As of this date, MM/DD/YY, AQMD has not received a nuisance odor compliant that was positively verified by AQMD compliance staff from any Southern California Gas Company installation.

Response to Comment #8-3
The AQMD does indeed have a rule under Regulation IV for nuisance, Rule 402-NUISANCE. The rule language is as follows:

"A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."

"The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

Under Rule 402 and the California Health and Safety Code Section 42301, nuisance potential has always been a basis for permitting.

Field compliance staff investigate reported nuisance reports regarding odor issues and if they collect 8 – 10 affidavits from individuals who wish to allege a nuisance complaint and staff can positively identify the source of the odors causing the nuisance, a Notice of Violation can be written to that source that caused the odor nuisance. This policy has been in place since the May 7, 1976 adoption of Rule 402.

Staff expanded the exemption for both tar pots and asphalt day tankers so that several of these units, that are currently permitted, could be transitioned into the Rule 222 filing program while still maintaining the permit operation conditions. Both tar pots and asphalt day tankers are subject to Rule 402 – NUISANCE.

Response to Comment #8-4
Staff has crafted additional rule language to include storage of odorant, transfer and control equipment for paragraph (m)(9) in proposed amended rule 219 as follows:

(9) Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 950 liters (251 gallons) capacity and equipment used exclusively for the storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment. This exemption does not include asphalt.

In addition, staff also crafted additional rule language in proposed amended rule 222 as follows:

Storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment.

Staff believes that the small odorant storage, transfer and control equipment will be a viable small emitting source candidate for the Rule 222 filing program.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Yorke Engineering – Comment Letter #9

October 29, 2012

Don Hopps
SCAQMD PRDAS
21865 Copley Dr; 2nd Floor
Diamond Bar, CA 91765
909-396-2334
dhopps@aqmd.gov

Subject: **Permit Exemptions for Aluminum Melting Pots with Trace Amounts of Beryllium**
Consolidated Precision Products – Pomona (ID 126536)

Dear Mr. Hopps:

We are submitting a request to include aluminum melting pots with trace amounts of beryllium to Rule 219. We understand that comments are being solicited per the Notice of Public Consultation Meeting and CEQA Scoping Meeting for Proposed Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II and, Proposed Amended 222 - Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant to Regulation II. Yorke Engineering, LLC (Yorke) previously submitted this document to you and to Rick Hawrylew on September 18, 2012; Rick is the permit engineer for Consolidated Precision Products (CPP) in Pomona. We reviewed the notice and do not see that this category equipment is being considered for Rule 219.

Yorke is assisting Consolidated Precision Products (CPP) in Pomona in achieving compliance with the requirements of SCAQMD Rule 1147. We prepared the Rule 1147 Alternate Compliance Plan which documents the schedule by which this facility expects to meet the NOx emission limits for each piece of permitted equipment. Since the cost of retrofitting or replacing the equipment is significant, CPP is investigating ways to reduce the costs of compliance while still meeting the regulatory requirements. In some cases, the cost of retrofit burners exceeds the value of the equipment.

One avenue that we want to explore is to operate some aluminum melting pots that are currently permitted under Rule 219 permit exemptions. If the equipment is exempt from permitting, CPP can surrender the permits to operate and the equipment would no longer be subject to Rule 1147. Since these devices are very small combustion sources, they do not contribute significant NOx emissions whether they are permitted or not.

We conducted an analysis of the SCAQMD-permitted aluminum melting pots operating at CPP - Pomona to determine whether they qualify for permit exemptions. We identified three criteria which must be met in order to qualify for a permit exemption under Rule 219:

1) Heat input rating must be <2,000,000 Btu/hour;
2) Health risk due to emissions of beryllium must be below Rule 1401 thresholds; and
3) The equipment must not be subject to a federal NESHAP.

We ask for your concurrence that the permit exemptions described in this letter are applicable and seek consent to surrender the permits for these melting pots and remove them from Rule 1147 applicability.

9-1

BACKGROUND

CPP Pomona has several SCAQMD-permitted aluminum melting pots, each with a capacity of less than 992 lbs, which process aluminum alloys that contain trace amounts of beryllium (<0.07% by weight). If the total heat input rating of these melting pots is less than or equal to 2 mmBtu/hour they may be exempt from permitting under Rule 219 (e)(2) if a health risk assessment can demonstrate that the units will not require a permit due to significant health risk impacts; 219(s)(2) excepts equipment that has significant health risk impacts but would otherwise qualify for a permit exemption. By eliminating these permits, these units would not be subject to the NOx limits of Rule 1147. CPP Pomona is a Title V facility. Table 1 shows the current list of permitted melting pots.

Table 1: Permitted Aluminum Melting Pots

Equipment Description	A/N	Permit #	# of Burners	Permitted Heat Input Rating (Btu/hr)	Actual Measured Maximum Heat Input Rate (Btu/hr)	Weight Capacity
Aluminum Holding Furnace 8-F, 300#	379807	F38944	1	1,000,000	356,581	300 lb
Aluminum Holding Furnace 5-F, 300#	379817	F38958	1	1,000,000	357,287	300 lb
Aluminum Melting Furnace 3-F, 600#	379833	F38928	1	1,000,000	691,928	600 lb
Aluminum Melting Furnace 5-E, 900#	379819	F38960	1	2,250,000	775,114	900 lb
Aluminum Melting Furnace 4-E, 900#	379818	F38959	1	2,250,000	1,009,000	900 lb
Aluminum Melting Furnace 3-E, 900#	379816	F38957	1	2,250,000	934,435	900 lb
Aluminum Melting Furnace 2-E, 900#	379822	F39029	1	2,250,000	1,129,898	900 lb
Aluminum Melting Furnace 2-F, 900#	379824	F39030	1	2,250,000	1,351,253	900 lb

9-2

Rule 219 Permit Exemptions

The permit exemption in 219(e)(2) is for melting pots with a capacity of less than 992 lbs in which aluminum alloys are melted that contain over 50% aluminum provided the alloy does "not contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead and such furnaces are exempt pursuant to paragraph (b)(2)" (i.e. heat input rating is <2,000,000 Btu/hour).

Since the alloys used in these melting pots contain trace amounts of beryllium, it would appear that this exemption is unavailable. However, the SCAQMD has allowed a permit exemption for melting pots which process alloys that do not contain significant amounts of beryllium based on the results of a Rule 1401 health risk assessment.

HEAT INPUT RATING

Five of the melting pots have heat input ratings of 2,250,000 Btu per hour as listed on their permits; the other three are listed at 1,000,000 Btu/hour. However, CPP had all of their aluminum melting pots tested by technicians from the Southern California Gas Company who measured their actual maximum heat input rating. All are below 2,000,000 Btu/hour as indicated in Table 1. Attached to this letter is documentation of the testing to measure maximum heat input rating. All melting pots meet the exemption under 219(b)(2).

EMISSION CALCULATIONS

The melting, pouring and casting of aluminum alloys generates emissions of particulate matter (PM) and beryllium due to their presence in the alloys.

Emission Factors

We estimated PM emission rates using emission factors from United States Environmental Protection Agency, AP-42. The emission factors for the aluminum melting, pouring and casting processes are summarized in the Table 2.

Table 2: PM Emission Factors for the Aluminum Melting Pots

Process	PM Emission Factor (lbs/ton)	Source
Aluminum Pouring and Casting	0.04	AP-42, Section 12.11, Table 12.11-2
Aluminum Melting	1.9	AP-42, Section 12.8, Table 12.8-2
Combined	**1.94**	

We estimated emissions of beryllium by multiplying the PM emission rates by the weight percentage of this metal. Table 3 lists the aluminum alloys processed at this facility with trace amounts of beryllium and the weight percentage ranges.

Table 3: Aluminum Alloys with Trace Beryllium Content

Alloy	Be (%)
A357.0 Low Mag.	.04 - .07
A357.0 Med. Mag.	.04 - .07
A357.0 High Mag.	.04 - .07
D357.0	.04 - .07

9-3

For the purpose of this analysis we assumed that the maximum percentage of beryllium was 0.07%.

Emission Rates

We calculated annual and hourly emissions based on aluminum throughput rates that were determined based on the maximum individual cancer risk threshold; see the health risk assessments below. We assumed an operating scheduled of 8 hours/day, 5 days/week, 52 weeks/year. Based on the Tier 3 health risk assessment, the maximum aluminum processing throughput that would allow the aluminum melting pots to qualify for the permit exemption are listed in Table 4.

Table 4: Aluminum Alloy Process Rates (per melting pot)

(tons/year)	(lbs/month)	(tons/hour)	(lbs/hour)
443.5	73,917	0.213	426.4

The emission rates for PM and beryllium are shown in Table 5.

Table 5: Emission Rates

Pollutant	Compound Content in Aluminum Alloy (%)	Maximum Hourly (lbs/hour)	Maximum Annual (lbs/year)
Particulate Matter (PM)	-	0.413649	860.39
Beryllium	0.07%	0.000290	0.60

HEALTH RISK ASSESSMENT

The aluminum alloys processed in the melting pots contain beryllium, which is a toxic air contaminant (TAC). Beryllium may present a carcinogenic/chronic hazard. In order to qualify for a permit exemption, the health risk impacts from each melting pot cannot exceed the thresholds listed in the paragraph 219(s)(2) exception, which references the Rule 1401 health risk index thresholds:

1) Increase in Maximum Individual Cancer Risk (MICR) must be less than one in one million (1.0×10^{-6})[1];
2) The increase in total chronic hazard index (HIC) will not exceed 1.0 at any receptor location[2];
3) The increase in total acute hazard index (HIA) will not exceed 1.0 at any receptor location[3].

Our objective was to determine the maximum aluminum alloy process throughput rate that would result in health risk indices just below the threshold limits. Our approach was to set up the health risk analysis spreadsheet to calculate the health risk indices with annual throughput weight as an input. The maximum hourly process rate was calculated by dividing the annual rate by the maximum hours per year. We varied the annual input quantity until we reached one of the

[1] Rule 1401(d)(1)(A)
[2] Rule 1401(d)(2)
[3] Rule 1401(d)(3)

health risk thresholds. In this case, MICR of 1 in one million for the nearest offsite worker was the limiting health risk index.

We performed a Tier 2 health risk analysis in accordance with SCAQMD guidelines[4]. We then conducted a Tier 3 analysis and found that it yielded an even higher annual throughput limit.

Maximum Individual Cancer Risk (MICR) is calculated as follows:

MICR = Cancer Potency (CP) x Dose-Inhalation (DI) x Multipathway Factor (MP)

Where:

$DI = C_{air} \times DBR \times EVF \times 10^{-6}$

$C_{air} = Q_{tons} \times X/Q \times AF_{ann} \times MET$

Therefore, the equation for calculating MICR is:

$MICR = CP \times Q_{tons} \times X/Q \times AF_{ann} \times MET \times DBR \times EVF \times 10^{-6} \times MP$

Where:

CP	Cancer Potency $(mg/kg\text{-}day)^{-1}$
DI	Dose through inhalation (mg/kg/day)
MP	Multipathway factor, if applicable (unitless)
C_{air}	Annual average 24 hour per day concentration in air ($\mu g/m^3$)
DBR	Daily breathing rate (L/kg body weight-day)
EVF	Exposure Value Factor (unitless)
Q_{tons}	Maximum emission rate (tons/year)
X/Q	Dispersion factor [$(\mu g/m^3)$/(ton/year)]
AF_{ann}	Annual concentration adjustment factor (unitless)
MET	Meteorological correction factor (non-dimensional)

Chronic (HIC) and Acute (HIA) health risk indices are calculated as follows:

$\text{Total HIC}_{\text{target organ}} = \Sigma\{[Qyr_{TAC} \times (X/Q) \times MET \times MP]/(\text{Chronic REL}_{TAC})\}_{\text{target organ}}$

$\text{Total HIA}_{\text{target organ}} = \Sigma\{[Qhr_{TAC} \times (X/Q)_{hr}]/(\text{Acute REL}_{TAC})\}_{\text{target organ}}$

Where:

Σ_{TAC}	Sum of the contribution for each Toxic Air Contaminant (TAC)
HIC	Chronic hazard index (calculated for each target organ)
HIA	Acute hazard index (calculated for each target organ)
Q_{TAC}	Emission rate of each TAC

9-3

[4] Risk Assessment Procedures for Rule 1401 and 212, Version 7.0 (7/1/2005)

X/Q	Annual average dispersion factor ($\mu g/m^3$)/(ton/year)
REL_{TAC}	Chronic or Acute Reference Exposure Level ($\mu g/m^3$) for each TAC
X/Q_{hr}	1-hour average dispersion factor in ($\mu g/m^3$)/(lb/hour)
MP	Multi-pathway adjustment factor
MET	Meteorological correction factor (non-dimensional)

Since the melting pots do not have dedicated exhaust stacks, we modeled their emissions as a volume source to determine the dispersion factor. The building dimension is approximately 745 ft x 298 ft. For a volume source, the receptor distance is the distance from the center of the building to the nearest receptor location. Table 6 lists the parameters used in this analysis.

Table 6: Parameters for Tier 2 Health Risk Analysis

Parameter	Value		Comment
	Residential	Worker	
Source Type	Volume		
Building Area	222,010 sq. ft.		
Building Height	30 ft.		
Operating Hours	8 hours/day, 5 days/week		
Operating Days	Maximum 260 days/year		
Distance to Receptor	165 meters	120 meters	
Dispersion Factor X/Q	1.63 ($\mu g/m^3$)/(tons/year)	2.57 ($\mu g/m^3$)/(tons/year)	Table 5A (Area >30,000 ft^2, Height >20 ft)
1-Hour Dispersion Factor X/Q_{hr}	86.95 ($\mu g/m^3$)/(lb/hour)	117.1 ($\mu g/m^3$)/(lb/hour)	Table 7 (Area >30,000 ft^2, Height >20 ft)
Q_{tons}	315.5 tons/year		
Q_{hour}	303.4 lbs/hour		
AF_{ann}	1.0	4.2	Table 3C
DBR	302	149	Table 9A
EVF	0.96	0.38	Table 9B
MET	0.91		Table 4B (Pomona)

The Tier 2 health risk analysis results are summarized in Table 7.

Table 7: Tier 2 Health Risk Analysis Results

Risk Index	Resident	Worker	Rule 1401 Standard
Maximum Individual Cancer Risk (MICR)	7.76×10^{-7}	9.99×10^{-7}	1×10^{-6}
Chronic Health Index (HIC)	4.55×10^{-2}	7.15×10^{-2}	1.0
Acute Health Index (HIA)	0	0	1.0

9-3

We also performed a Tier 3 analysis using the EPA-approved SCREEN3 tool to calculate the dispersion factors. These dispersion factors were used to calculate health risk in a similar fashion to the Tier 2 approach. Table 8 lists the additional parameters used in the Tier 3 analysis.

Table 8: Parameters for Tier 3 Health Risk Analysis

Parameter	Value		Comment
	Residential	Worker	
Source Type	Volume, >30,000 sq.ft.		
Building Height	30 ft.		
Dispersion Factor X/Q	42.55 ($\mu g/m^3$)/(g/sec)	57.66 ($\mu g/m^3$)/(g/sec)	0.08 x 1-hour X/Q
1-Hour Dispersion Factor X/Q_{hr}	531.9 ($\mu g/m^3$)/(g/sec)	720.8 ($\mu g/m^3$)/(g/sec)	SCREEN3 output
Q_{tons}	443.5 tons/year		
Q_{hour}	426.4 lbs/hour		
MET	1.00		

The Tier 3 health risk analysis results are summarized in Table 9.

Table 9: Tier 3 Health Risk Analysis Results

Risk Index	Resident	Worker	Rule 1401 Standard
Maximum Individual Cancer Risk (MICR)	8.99×10^{-7}	9.99×10^{-7}	1×10^{-5}
Chronic Health Index (HIC)	5.72×10^{-2}	7.14×10^{-2}	1.0
Acute Health Index (HIA)	0	0	1.0

BERYLLIUM NESHAP

We evaluated whether the federal National Emission Standard for Hazardous Air Pollutants (NESHAP) for Beryllium (40 CFR 61 Subpart C) applies to the aluminum melting pots since sources subject to this regulation would be excepted from the permit exemption under Rule 219(s). 40 CFR 61 Subpart C applies to the following stationary sources:

1) Extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste
2) Machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5 percent beryllium by weight.

Table 10 summarizes the definitions of beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste as defined in § 61.31, and the applicability to the aluminum alloys processed by CPP.

Table 10: Material Definition and Applicability

Material	Definition Pursuant to § 61.31	Processed By CPP? (Y/N)
Beryllium Ore	Any naturally occurring material mined or gathered for its beryllium content	N
Beryllium	Element Beryllium	N
Beryllium Oxide	BeO	N
Beryllium Alloys	Any metal to which beryllium has been added in order to increase its beryllium content and which contains more than 0.1 percent beryllium by weight.	N
Beryllium-Containing Waste	Material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to 40 CFR 61 Subpart C.	N

Since CPP does not process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste, 40 CFR 61 Subpart C is not applicable.

9-3

FINDINGS AND CONCLUSIONS

CPP intends to comply with the requirements of Rule 1147 and is following the schedule proposed in their Alternate Compliance Plan. They are seeking legitimate ways to reduce the costs for retrofitting and replacing combustion equipment. We believe the aluminum melting pots that are currently permitted can operate under Rule 219 permit exemptions, the permits can be surrendered, and these units should no longer be subject to Rule 1147.

Based on our analysis of the SCAQMD regulations and health risk analysis, our findings are as follow:

1) Melting pots with capacity of less than 992 lbs which process aluminum alloys that contain trace amounts of beryllium (~0.07% by weight) should qualify for permit exemption under Rule 219(e)(2) provided that exemptions under 219(b)(2) (heat input <2 mmBtu/hour) and 219(s)(2) (health risk limits) are also met.
2) In order to meet the exemption under Rule 219 (s)(2), each melting pot must stay under Rule 1401 health risk index thresholds, which can be met by limiting the annual throughput of beryllium-containing aluminum alloy to 443.5 tons/year for each melting pot.
3) CPP is not a stationary source that is subject to 40 CFR 61 Subpart C- National Emission Standard for Beryllium.

9-3

We ask for your concurrence that the Rule 219 permit exemptions described in this letter are applicable and seek your consent to surrender the permits for these aluminum melting pots and remove them from Rule 1147 applicability. We look forward to your response and would welcome the opportunity to meet with you to discuss this further. Should you have any questions please contact me at 949-248-8490 x224.

Sincerely,

Peter J. Moore

Peter Moore
Principal Engineer
Yorke Engineering, LLC

Cc: Al Bannister, CPP-Pomona
Rick Hawrylew, SCAQMD
Brian Yorke, Yorke Engineering, LLC

Attachment:
1. Southern California Gas Company Tests of Heat Input Rating
2. Health Risk Assessment

Response to Comment #9-1

Staff met with the commentor to discuss the trace amounts of Beryllium in melting pots containing aluminum alloys. The main purpose for permitting the melting pots, which are furnace fired, is the particulate emissions generated by such processes. In addition, aluminum alloys that have beryllium not only produce particulate emissions but particulate emissions containing beryllium compounds. Rule development staff met with engineering staff and was advised that the current permits for the facility's melting pots are not based on heat input but rather the particulate emissions that are produced during the melting operation.

Response to Comment #9-2

The original reason for requiring permits above the size and volume limits in as currently shown in Rule 219 was not because of the heat input but rather the capacity of the alloying materials, less any toxic materials such as arsenic, beryllium, cadmium, chromium and lead. Staff reviewed the history of Rule 219 and noted that these

types of furnaces and melting pots were permitted due to particulate emissions, which could also contain arsenic, beryllium, cadmium, chromium and lead particulate emissions.

Response to Comment #9-3
In response to the request for requiring permits for metal furnaces, AQMD staff has reviewed the history of Rule 219 and the information provided in your request. Based on this review and given that these furnaces have been and are required to have permits because of process particulate emissions (versus combustion emissions), staff is not proposing to exempt these units from the requirement to have an AQMD permit.

When Rule 219 was adopted in 1976, the lower limit for combustion sources requiring a permit in Rule 219 was 20 million Btu/hr. The requirement for permits for metal furnaces since that time has always been capacity – greater than 992 pounds or greater than 452 cubic inches. This capacity requirement is a separate criteria from the burner(s) size requirement. In 1988 the section on metal melting in Rule 219 was revised to clarify that furnaces exempt based on process weight or volume would still require a permit if there burner(s) were greater than 2 million Btu/hr (the revised combustion criteria since 1988).

Response to Comment #9-4
Since, the AQMD has always required these metal melting furnace be subject to permits because of particulate emissions, staff reviewed the information presented in the comment letter and has the following comments. The emission factor for particulates from these operations represents an estimate of average emissions – not maximum emissions. Based on the information provided in the comment letter, the justification used in 1976 for requiring permits for these devices (particulate emissions) is still valid.

With regard to Rule 1147 requirements, staff has found that burners are available to meet the 60 ppm emission limit for this equipment in the rule. However, this is one of many categories of equipment which staff is currently evaluating as part of the Technology Assessment for Rule 1147. If the Rule 1147 Technology Assessment finds that the cost or cost-effectiveness is prohibitive, staff will propose to change the requirements in Rule 1147 for this equipment.

Staff has also found that most of these furnaces are eligible for the five year extension of the compliance date based on NOx emissions. There are a variety of options to document NOx emissions of one pound per day or less. Some furnaces only require a timer to prove their emissions are less than 1 pound per day while furnaces with modulating burners can use a gas meter which costs about $400 to document gas use and the resulting NOx emissions.